

ABSTRACT

[0179] A power factor correcting power supply includes an input stage power converter and an output stage power converter. The input stage power converter includes a plurality of series connected boost switches and a power factor correction controller. The power factor correction controller may direct the operation of the boost switches with series interleave phasing to perform power factor correction and voltage regulation. The boost switches are supplied input voltage and input current from a power source. The input voltage is converted to a DC boost voltage by high frequency series interleaved switching of the boost switches. The DC boost voltage is converted to a DC output voltage by the output stage power converter. The DC output voltage is provided on a DC rail for a load of the power factor correcting power supply.